



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,822	10/20/2003	Akitoshi Kuroda	117511	9909

25944 7590 03/28/2005

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

BLACKMAN, ROCHELLE ANN J

ART UNIT	PAPER NUMBER
----------	--------------

2851

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/687,822

**Applicant(s)**

KURODA, AKITOSHI

**Examiner**

Rochelle Blackman

**Art Unit**

2851



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 is/are rejected.  
7) ☒ Claim(s) 2-11 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/4/2004.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities: on pg. 3, paragraph [0021], "63A" and "63", and should not be underlined and on pg. 4, paragraph [0022], "cooling efficiency of" should not be underlined.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuhata et al. (U.S. Patent No. 5,951,136) in view of Wilton (U.S. Patent No. 3,117,489).

Furuhata discloses a projector (1) having a light source (8), a light modulating device (925R, 925G, 925B) that modulates light beams emitted from the light source in accordance with image information to form an optical image, and a case (2) that accommodates the light source and the light modulating devices, and the projector enlarges and projects the optical image formed by the light modulating devices, the projector comprising: leg portions (31R, 31L) that are disposed so as to be extendable from and retractable to an outer peripheral surface of the case to adjust a projection

position of the enlarged and projected optical image; an intake opening (150) that is formed in a surface of the case disposed with the leg portions; and an intake fan (15) that is disposed inside the case near the intake opening and that introduces cooling air from outside of the case.

Furuhata does not appear to disclose an intake surface of the intake fan being disposed at an "inclination" with respect to a plane of the case in which the intake opening is formed.

Wilton teaches providing an intake surface of an intake fan (50) being disposed at an inclination with respect to a plane of a case (10) in which an intake opening (12) is formed.

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the fan to dispose the intake fan of the projector of the Furuhata reference at an "inclination" with respect to plane of the case in which the intake opening is formed, as taught by Wilton for purpose of providing an improved heat-dissipating system minimizing hot areas on the case as well as the temperature of the air within the case (see col. 1, lines 15-18).

#### ***Allowable Subject Matter***

1. Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

Claim 2-7 have been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the intake fan being used in a cooling flow path that cools a power supply circuit and the light source drive circuit in combination with the particular combination of features recited in claim 1.

Claims 8-11 have been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the combination of the intake fan being a first intake fan and a second cooling system that used the first intake fan to introduce, through the first intake opening to the inside of the case, air from the outside of the case to thereby cool the power supply circuit and the light source drive circuit, further in combination with the features recited in claim 1.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2851

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RB

RODNEY FULLER  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'R. Fuller', is written over the printed name and title.